

Household biogas units, Ethiopia

Essential facts and figures	
Project activity	Subsidised construction of small-scale biogas units for rural households in Ethiopia.
Project site	Ethiopia
Project owner	Development Bank of Ethiopia
Start date of operation	2016
Project duration	2016 to 2024
Quantity of emission reductions (in tonnes of CO ₂)	202'318 CERs and 219'000 SCF-certificates (CCF share of 21%)

Project description

The project covered the subsidised construction of biogas units for rural households in Ethiopia, whose price was reduced by around 240 USD to reach 560 USD. The biogas units were built by local biogas companies working with specially trained masons. The local biogas companies received a yearly bonus of 10 USD per reliably functioning biogas unit, ensuring that the biogas facilities are properly built and serviced.

The biogas units were built underground and topped off with domed masonry work. They have a capacity of 3 to 6 m³ and require dung from at least four heads of cattle to be processed into biogas. The biogas replaces non-sustainably used wood for cooking purposes. The nutrient-rich sludge generated as a byproduct can be used as fertiliser. Households are thus able to reduce their fuel and fertiliser expenses, spend less time gathering wood, and improve their health by inhaling fewer pollutants when cooking. Connecting the facility to the latrine made it possible to further improve biogas yield and hygiene.

The World Bank's "Carbon Initiative for Development" (Ci-Dev), in which the Climate Cent Foundation holds a share, is purchasing 202'318 CERs generated by the project over the period 2016 to 2020 and 219'000 certificates issued under the World Bank's "Standardised Crediting Framework" (SCF) for emission reductions generated over the period 2021 to 2024.

Project status (as of July 2025)

The project was registered by the UN in March 2016 as n° 10268 and by Ethiopia under the SCF in 2025.

The project covered the second phase, launched in 2014, of Ethiopia's national biogas programme. However, emission reductions were credited under the project only from 1 April 2016 onward. 36'000 biogas units subsidised by the programme have been in operation.

Project owner

The Development Bank of Ethiopia is a specialised financial establishment tasked to implement the national development strategy. It provides financial and technical support to selected projects of national interest – such as the national biogas programme.

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